We envision the world's premiere research institute for food safety and security.

Plan of Action

Creating a Western Institute for Food Safety & **Security**

Faculty will collaborate with a diverse group of university, state and federal scientists/officials, and agricultural and food industry participants. Working in concert, these individuals will be positioned to:

- Develop new tools for rapid diagnosis and response to control animal and crop contamination and food or waterborne outbreaks.
- Develop consistent preventative strategies and policies.
- Address risks associated with bioterrorism.
- Recommend improved control methods.
- Provide education and training for all segments of the food systems continuum (from production environment to consumer).

The Institute will also provide critical, science-based information for the assessment of standard trade guidelines and contribute to the development of appropriate policy that will improve health standards and international movement of food products.

"In the wake of September 11th, the safety of our food is more important than ever. My Administration has taken steps to ensure the security of our food supply, just as we have for other basic elements of our public security systems for our airports, highways, and other transportation systems. In the months and years ahead, the Western Institute for Food Safety & Security will play an important role in guaranteeing the safety of all aspects of California's food supply." - Governor Gray Davis



The Western Institute for Food Safety & Security was funded in 2002 by an initial \$5 million grant from the Governor's "Buy California" initiative and in kind facility support from the University of California, Davis.

Governor Grav Davis' "Buy California

Initiative" provides

funding for the creation

and development of the

Western Institute for

Food Safety & Security

The Western Institute for Food Safety & Security will support an improved food supply with enormous health benefits for residents and positive economic returns for the region's food industries.



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Protecting our food system is more important than ever. With the Western Institute for Food Safety & Security, California is equipping itself to do the job.

Building the Science



Food Safety & Security

in California

A unique new collaborative initiative involving the California Department of Food and Agriculture, the California Department of Health Services, and the University of California will revolutionize approaches for assuring safe food, food security and improving global trade. These agencies and the University of California Davis School of Veterinary Medicine, School of Medicine, the College of Agricultural and Environmental Sciences, and federal agencies, including Health and Human Services and United States Department of Agriculture have identified food safety and public health as a major initiative. The initiative will serve as the focus for expanded research, teaching and service activities, promising to have a profound impact on the public, plant/ animal, and environmental health. This initiative will coordinate existing food safety efforts among industry, education and public agencies; and it will encompass all food products of animal and plant origin.

Advancing Food Safety & Public Health

Foodborne illnesses affect 1.5 billion people annually and cause over 3 million deaths worldwide. The medical costs on a global basis are huge. In the United States, the estimated medical costs and related losses due to absenteeism are approximately \$23 billion per year. The globalization of the food supply has contributed to the emergence of more than 30 new causes of foodborne diseases over the last 25 years.

Diseases like Bovine Spongiform Encephalopathy (mad cow disease) in Europe clearly demonstrate the economic impact of foodborne disease, as well as the social upheaval that can occur. In addition, fresh fruits and vegetables are at risk for being associated with foodborne illness. The research infrastructure to address these issues is lacking. The changing management of livestock, poultry, aquatic species and crops has led to new, speculative concerns about the human health effects of antibiotics, hormones and chemicals used in intensive production systems.

A Collaborative Model

Collaboration among agencies involved in food safety is the foundation of the proposal for a Western Institute for Food Safety & Security. The Institute is dedicated to food safety research and the promotion of improved communication, cooperation, and collaboration among government food safety agencies, private food production industries, academia and consumers.

Meeting the Goals of Reducing Foodborne Illness and Promoting Food Safety

The Institute's mission is to ensure the safety of the food supply by supporting partnerships and the research and technology required for both food safety and science-based food safety policies. This proposal is a response to rapidly changing situations that have put consumers and food and agricultural industries at an increased risk for foodborne illness outbreaks and food product recalls.

Without a significant change in the current food safety system in the West, more outbreaks and food product recalls are inevitable. Past experience suggests these outbreaks will continue to be more

frequent, more complex

and more costly.



California's need to fortify the science of food safety has never been more urgent. A unique new collaborative initiative brings the collective powers of the State's premier food safety entities to bear on this important issue. The Western Institute for Food Safety & Security combines the expertise of the California Department of Food and Agriculture, the California Department of Health Services, the University of California, Private industry, and Federal agencies.

FOOD SAFETY

ood Safety is strongly supported and expected by the public. The food safety scientific expertise available through the Institute will focus on the following research

- Microbiological safety of fruits, vegetables and nuts.
- Development of rapid diagnostic tests.
- Pre- and post-harvest food safety, including new challenges with biosecurity.
- Antimicrobial drug use in agriculture and evaluation of resistance factors.
- Support of consumer food safety education and food handler education for all individuals; from the farm to the table.
- Treatment methods to provide safe use of animal manures to fertilize specialty crops.
- · Quality of genetically modified products.
- Applied nutrition studies.
- Prevent bioterrorism by developing methods to enhance biosecurity.
 - Advanced research in risk analysis, risk assessment and risk management.
 - Development of scientifically supported food safety standards and policies.
 - Safe disposal and alternative uses of animal mortality.
 - Improved food safety & security for food moving across California Borders.
- Molecular diagnostic and epidemiologic methodologies.

& SECURITY

Mission Statement:

The mission of the Institute is to conduct research that will enhance food safety in all sectors of the food systems' continuum from production environment to consumer. The Institute shall be a leading resource for scientific informtion that will facilitate innovations and new practices that will improve food safety, build greater protection against intentional harmful acts directed at the food system, enhance economic stability of the food industry, and overall, lead to improved human health and welfare.



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